



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
|-----------------|-------------|----------------------|---------------------|------------------|

10/699,858

10/31/2003

Howard W. Lutnick

03-1086

5127

63710

7590

03/21/2011

INNOVATION DIVISION  
CANTOR FITZGERALD, L.P.  
110 EAST 59TH STREET (6TH FLOOR)  
NEW YORK, NY 10022

EXAMINER

SHUMATE, PAUL W

ART UNIT

PAPER NUMBER

3693

MAIL DATE

DELIVERY MODE

03/21/2011

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |                                      |                                       |  |
|------------------------------|--------------------------------------|---------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/699,858 | <b>Applicant(s)</b><br>LUTNICK ET AL. |  |
|                              | <b>Examiner</b><br>PAUL SHUMATE      | <b>Art Unit</b><br>3693               |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 October 2010.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 12-16, 18-22 and 30-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 12-16, 18-22, 30-38 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Status of Claims***

1. This action is in reply to the communication filed on 10/12/2010.
2. Claims 12-16, 18-22, 30-38 are pending, have been examined, and are rejected.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:  
  
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claim(s) 12-16, 18-22, 30-38 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
5. The currently amended claims recite many limitations which are unclear and/or indefinite. Various examples are shown below, but all claimed limitations should be reviewed and corrected for other similar issues which render the claim language unclear and indefinite as to insure the claimed limitations clearly and particularly point out and distinctly claim the subject matter which applicant regards as the invention.
6. Claims 12 and 30 claim the limitation "a first plurality of keys, in which one of the first plurality of keys corresponds to the benchmark instrument; and a second plurality of

Art Unit: 3693

keys in which each of the second plurality of keys is mapped to a function that corresponds to the benchmark instrument." There is insufficient antecedent basis for this limitation in the claims. It is unclear if "the benchmark instrument" refers "a benchmark instrument" of the limitation "in which each quadrant displays a plurality of non-benchmark issues related to a benchmark instrument," as in the function corresponds to all the possible benchmark instruments for all quadrants or if it refers to "a first benchmark instrument" or "a second benchmark instrument" of the limitation "in which the view region comprises a first quadrant representing a first benchmark instrument and a second quadrant representing a second benchmark instrument" as in the function corresponds to the specific benchmark instrument of a specific quadrant.

7. The claims further recite "in response to one of the first plurality of keys being pressed, directing the display device to select the at least first quadrant and map each of the second plurality of keys to execute a first function that corresponds to the first benchmark instrument." This limitation appears to mean that each of the second plurality of keys is mapped to execute the same function and that function corresponds to the first benchmark instrument. Does that mean that all of the second plurality of keys now all perform the exact same function corresponding to the single benchmark issue meaning that pressing any of the keys will result in the exact same outcome? For example, if the first function is to place an order on a non-benchmark issue that corresponds to the first benchmark instrument, pressing any of the second plurality of keys will place an order on a non-benchmark issue that corresponds to the first benchmark instrument.

8. Regarding the limitation “in response to a different one of the first plurality of key being pressed, directing the display device to select the second quadrant and re-map each of the second plurality of keys to execute a second function that corresponds to the first benchmark instrument, in which the second function differs from the first function,” it is unclear how “selecting the second quadrant” is relevant or how it affects the system’s function since in response to pressing a different one of the first plurality of buttons, each of the second plurality of buttons are re-mapped to execute a second function that is different than the first function, but which second function still corresponds to the *first* benchmark instrument (in the first quadrant).

9. Additionally, claim 14 “place an order on a non-benchmark issue that corresponds to the first benchmark instrument.” Does this mean that all of the second plurality of buttons simply place general/generic orders on any non-benchmark issue that corresponds to the first benchmark instrument, or does this mean that each of the second plurality of buttons places a specific type of order on any non-benchmark issue that corresponds to the first benchmark instrument, or does this mean that each of the second plurality of buttons places an order on a specific non-benchmark issue which corresponds to a specific one of the second plurality of buttons?

10. Claims 12 and 30 recite “a display device that displays a view region comprising at least two trading quadrants” which is unclear and indefinite. If only two *quadrants* are displayed in the view region, and there are not any other viewable quadrants, then the two displayed areas would not be quadrants at all since each would represent one half

Art Unit: 3693

of the displayed area and not one fourth as would be the case if there were actually quadrants being displayed.

### **Claim Rejections - 35 USC § 103**

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claim(s) 12-16, 18-22, 30-38 rejected under 35 U.S.C. 103(a) as being unpatentable over Belzberg, U.S. Patent No.: 6,134,535, in view of Gutterman et al, U.S. Patent No.: 5,297,031, further in view of Khan et al., US Patent No.: 6,438,575.

13. As per claims 12-16, 18-22, 30-38, Belzberg teaches a system for electronic trading (see at least column 2 lines 14-18) which comprises a keyboard having keys for placing orders (see at least column 2 lines 14-18, column 3 lines 1-5, and column 3 lines 65-67), a display device which displays information regarding relevant stocks (see at least column 2 lines 18-22, column 2 lines 67-67, and column 3 lines 49-57), and a processor for controlling the information being displayed (see at least column 5 lines 33-45).

Art Unit: 3693

14. Belzberg does not specifically teach displaying multiple financial instruments in different trading quadrants, where each quadrant contains information relating to each specific financial instrument, and Belzberg also does not teach displaying one of the quadrants on the display in response to a user selecting that quadrant.

15. Gutterman teaches that the deck pane can be partitionable so that a plurality of decks can be simultaneously displayed (see at least column 13 lines 5-7). Each of the four displayed deck areas correspond to different commodity or instruments to be traded (see at least column 13 lines 7-10). Touch sensitive buttons are linked to the four screens and when pressed, selectively call up their respective deck area onto the full deck pane. The on screen keyboard has a plurality of buttons that may be dedicated to predetermined functions or can also provide conventional keyboard capability (see at least column 13 lines 17-26). Additionally, there are PARTIAL and TOTAL FILLED buttons which are linked to the financial instruments in specific deck frames that when pushed execute large orders at the touch of a button (see at least column 13 lines 47-58).

16. Specifically, in response to applicant's previous arguments relating to claim 12, Gutterman teaches "deck pane 135 can be selectively partitionable so that a plurality of decks can be simultaneously displayed, as illustrated in FIG 2c. The deck pane 135 is shown partitioned into four deck areas 135-1, 135-2, 135-3, and 135-4, each corresponding to a different commodity or instrument traded by the broker (column 13 lines 5-10)." The different instruments which correspond to the four quadrants/deck areas are interpreted to be substantially equivalent to the benchmark instruments

Art Unit: 3693

corresponding to Applicant's quadrants. The plurality of orders listed in each deck area which are related to the instrument corresponding to each deck area, such as shown in items 139-1 through 139-9 of FIG. 2b in Gutterman, are interpreted to be substantially equivalent to the "plurality of issues related to the benchmark instrument" as claimed by Applicant. In Gutterman, when a user presses one of the buttons 131 (labeled 1, 2, 3, 4 in FIG. 2c, labeled US-Z, US-H, US-M, US-I in FIG. 2b and in FIG. 2d), the corresponding deck area is selected and displayed, which is substantially equivalent to Applicant's claimed limitation of directing the display device to select the trading quadrant corresponding to a specific instrument in response to a trader pressing the key that corresponds to the instrument.

17. While the examiner still believes that Gutterman teaches or at least strongly suggests the limitations regarding *remapping the second plurality of keys, to perform a second function which is different than the first function, in response to selecting the second quadrant*, the examiner asserts that such limitations are old and well known in the art of computer programming and would be obvious inclusions into such a computer system. In support that such techniques are old and well known and would therefore be obvious inclusions in such a computer system, the teachings of Khan are included. Khan specifically teaches a computer system where a "mini keyboard may be replaced with a smaller number of programmable function keys that programmatically adapt as appropriate to the function of any current application displayed by the display panel (column 5 lines 9-12)" and further teaches that the "mini keyboard may be entirely replaced with a virtual keyboard implemented by the display panel in connection with a



Art Unit: 3693

touch screen sensor mounted in the case of the wireless device. Thus full function and specialized function data entry keys can be created as necessary or desired in support of the use of any application displayed by the display panel (column 12 lines 4-10).” It would have been obvious to include the techniques of remapping keys on a keyboard to different appropriate functions which correspond to which view area, window, or application is currently selected and displayed on a screen because the ability to hide different implementations of a function behind the same name, called polymorphism, greatly simplifies communication among objects and also enhances functionality and usability of a computer system by allowing fewer keys to perform more functions while requiring minimal user action (column 5 lines 9-12, column 12 lines 1-10).

18. Belzberg further teaches that the computerized trading system processes orders and initiates trade transactions (see at least column 2 lines 14-39, column 3 line 63 to column 4 line 6, and column 5 lines 9-25) which displays information relevant to transactions in real time (see at least column 7 lines 65-67). Belzberg also teaches buttons which toggle the display to different views to see various types of more specific information related to orders and to trading in general (at least Fig. 2B and 2C in Belzberg)

19. Gutterman further teaches a clearinghouse (see at least column 6 lines 60-62 and column 13 lines 37-40) as part of the system and that the at least two trading quadrants are spatially aligned in the view region to correspond to a spatial alignment, on the keyboard, of the first plurality of keys (at least Fig. 2C in Gutterman).

### **Response to Arguments**

20. Applicants arguments filed 10/12/2010 have been considered but are moot in view of the new grounds for rejection as shown above.

21. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

22. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

23. Any inquiry concerning this communication or earlier communications from the examiner should be directed to PAUL SHUMATE whose telephone number is (571)270-1830. The examiner can normally be reached on M-F 9:00 AM - 5:00 PM, EST alt Fridays off.

24. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Kramer can be reached on 571-272-6783. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3693

25. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/James A. Kramer/

Supervisory Patent Examiner, Art Unit 3693

Name: Paul W. Shumate  
Title: Patent Examiner  
Date: 1/29/2011  
Signature: /Paul Shumate/  
Examiner, Art Unit 3693